

Magnetic level gauge PN 40/CL 300

Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

Product group **710**

Type **100.0**

Sheet: 1/2

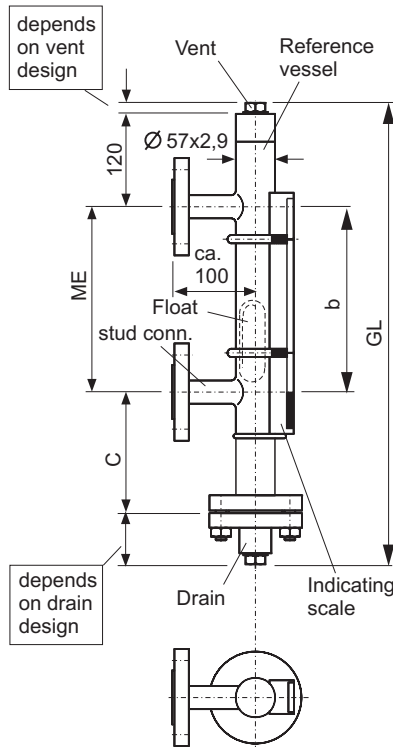
Revision: 8

Date:

04/07



Typ 100.0 e.g. equipped with magnetic switch, reed chain and indicating scale 710.AVG3.



Field of Application

The magnetic level gauge is for indicating the level height of liquids in any vessel via bypass. Simultaneously you can use level switches (s. 740.XXXX) or level sensors (s. 745.XXXX) mounted onto the reference vessel tube to signal level limits or measure the level height by remote means.

General Data

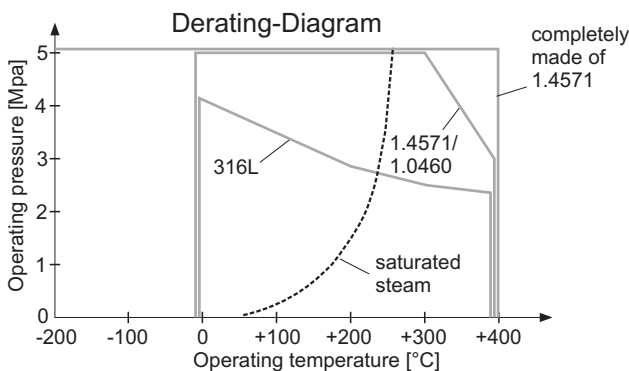
- Density, float 1.4571: from 0,75 g/cm³
- Titanium: from 0,54 g/cm³
- Precision for Interface or density: from $\pm 0,01$ g/cm³
- Measuring range (=ME): single piece up to 5000 mm, above split construction, from 3000 mm holding bracket each 1500 mm
- Measuring error: ± 10 mm
- Viscosity: max 1000 mPas
- Display type: 710.AVG3
- Connection: weld end (Standard), Flanges DIN and ANSI
- Drain/vent: Cap (Standard), plug 1/2" NPT, as option 3/4" NPT, G1/2A, G3/4A
- Valve DN6, optional DN8, Flange stud DIN and ANSI and acc. to customer spec.
- Material tube, stud, 1.4571 (Standard), ANSI-coded
- flanges, fixtures: Titanium, Hastelloy, etc.,
- float: 1.4571, Titanium etc.
- Weight: Basic 10,1 kg + 0,52 kg/100mm ME

Design Data

- Operating pressure: up to 5,2 MPa/300 lbs (see Derating-Diagram)
- Temperature Media
- Reference vessel cpl. 1.4571: -200 ... +400 °C
- flanges 1.0460: -10 ... +400 °C (see Derating-Diagram)
- Below -10 °C Indicating scale .AVG2 and below -20 °C add frost protection with 710.ISOL
- In both cases preparation for insulation included.

Certificates

- Pressure Vessel Directive (PED) 97/23/EG
- EC-Type Examination Certificate: TÜV 03 ATEX 2190 Zone 0
- Subject to alterations



Ordering no.

710.100.0 - XXX - XXXX - XXXXXXXX

Density, e.g. 054=0,54 g/cm³

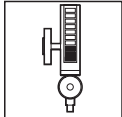
Center to center ME in mm

Connections etc. see sheet 710.VAR

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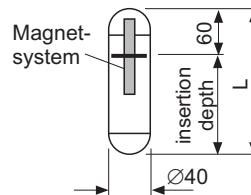




| | | |
|-----------------------------------|--------------------------|-------------|
| Details | Product group 710 | |
| | Type 100.0 | |
| | Sheet: 2/2 | Revision: 8 |
| | Date: 04/07 | |
| Float, Vent, Drain and Connection | | |

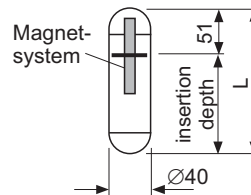
Float material 1.4571, Ø40, PN40/CL300

| Density range [g/cm ³] | Measure C [mm] | Total length L [mm] | Weight [g] | Part no. |
|--|----------------|---------------------|------------|--------------|
| 1,23 ... 1,52 | 170 | 160 | 159 | BG1001004152 |
| 1,04 ... 1,22 | 210 | 200 | 188 | BG1001004122 |
| 0,93 ... 1,03 | 260 | 250 | 221 | BG1001004103 |
| 0,87 ... 0,92 | 310 | 300 | 251 | BG1001004092 |
| 0,81 ... 0,86 | 360 | 350 | 286 | BG1001004086 |
| 0,75 ... 0,80 | 410 | 400 | 316 | BG1001004080 |
| Interface float (individually designed ±0.01 g/cm ³) | | | | BG1001004TRX |



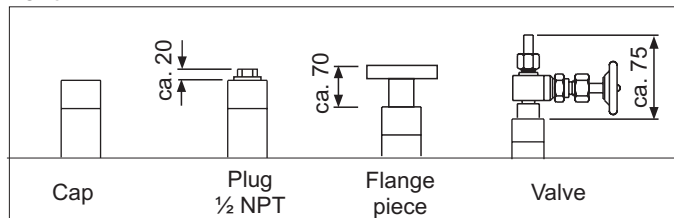
Float material Titanium, Ø40, PN40/CL300

| Density range [g/cm ³] | Measure C [mm] | Total length L [mm] | Weight [g] | Part no. |
|------------------------------------|----------------|---------------------|------------|--------------|
| 0,73 ... 0,78 | 260 | 250 | 173 | BG1001009078 |
| 0,67 ... 0,72 | 310 | 300 | 197 | BG1001009072 |
| 0,62 ... 0,66 | 360 | 350 | 220 | BG1001009066 |
| 0,58 ... 0,61 | 410 | 400 | 244 | BG1001009061 |
| 0,54 ... 0,57 | 460 | 450 | 262 | BG1001009057 |

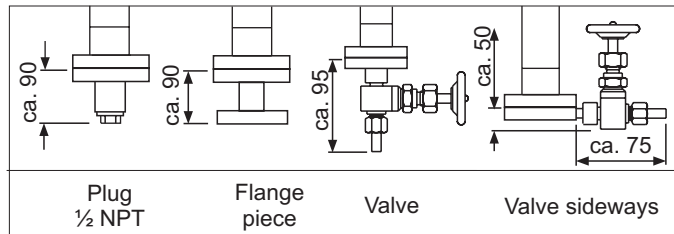


Interface float (individually designed ±0.01 g/cm³) BG1001009TRX
Density range corresponds to measuring error ±10 mm

Vent



Drain

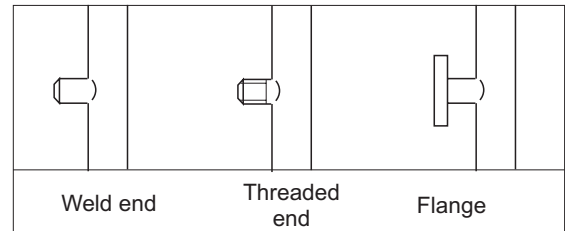


Design Data

Operating pressure: up to 5,2 MPa/300 lbs
(see Derating-Diagram for 1.4571)
Test pressure: Operating pressure x 1,3
Operating temperature: -200 ... +400 °C
(see Derating-Diagram for 1.4571)

Subject to alterations

Connections



Ordering no.

Accessories:

| Device | Product group |
|------------------|---------------|
| Magnetic switch | 740.XXXX |
| Level sensor | 745.XXXX |
| Indicating scale | 710.AVGX |
| Frost protection | 710.PLEXI |
| Heating | 710.HEAT |

Spare parts:

| Designation | Part no. |
|------------------|----------------------|
| Float | s. Float table above |
| Indicating scale | BG10.AVGX |
| Sealing | 04750395XXX |
| Fixing springs | 3813000672 |
| Align magnet | BG10XXXXMAKU |

There may be any other customer specified connections, materials and special floats.

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